



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

Borano, Inc.
4220 Myrica lane,
Miami, FL 33137

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER -Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Borano Series Wood Fixed Windows-L.M.I.

APPROVAL DOCUMENT: Drawing No.16-014, titled "Borano Series Fixed Windows", sheets 1 through 4 of 4, dated JAN 21, 2016, prepared by EngCo Inc., signed and sealed by Pedro M. De Figueiredo, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

Limitation:

1. 1x or 2x to be properly secured to sustain imposed load and to be reviewed by AHJ.
2. Min 3ksi concrete required at head/sill installation. Jambs can be installed into masonry or concrete.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, San Pedro Sula, Honduras and series and following statement: "Miami-Dade County Product Control Approved", noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**



NOA No. 16-0518.02
Expiration Date: August 04, 2021
Approval Date: August 04, 2016
Page 1

8
7/29/16

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's parts drawings and sections (submitted under files # **13-0814.06/#12-0713.08**)
2. Drawing No.**16-014**, titled "Borano Series Fixed Windows", sheets 1 through 4 of 4, dated JAN 21, 2016, prepared by EngCo Inc., signed and sealed by Pedro M. De Figueiredo, P.E.

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of Wood Fixed Windows, prepared by Hurricane Engineering & Testing, Inc., Test Reports No(s). **HETI-15-5047** and **HETI-15-5047**, both dated December 30, 2015, signed and sealed by Rafael E. Droz-Seda, P.E.

C. CALCULATIONS

1. Anchor Calculations and structural analysis, complying with FBC2014(5th edition), prepared by EngCo Inc., dated 01/20/16, signed and sealed by Pedro De Figueiredo, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

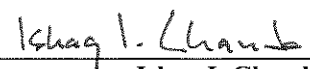
1. None.

F. STATEMENTS

1. Statement letter of conformance to FBC 2014 (5th Edition), prepared by Engco Inc., dated JAN 21, 2016, signed and sealed by Pedro M. DeFigueiredo, P.E.
2. Distribution agreement dated 07/27/16 between Borano Inc., USA and Maderas de America, Honduras, signed by Sam H. Hanna, Manager and Luis Amador, Manager, respectively on behalf of their companies.
3. Statement of lab compliance, as part of test report.

G. OTHER

1. None



Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 16-0518.02

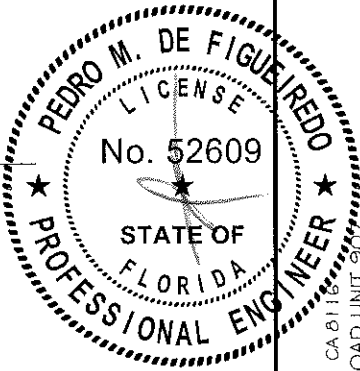
Expiration Date: August 04, 2021
Approval Date: August 04, 2016

BORANO WINDOW SERIES

FIXED WOOD WINDOW

MIAMI DADE APPROVAL

CODE VERSION: FLORIDA BUILDING CODE 2014 - HVHZ
CATEGORY: FIXED WINDOWS
IMPACT RESISTANT: LARGE & SMALL MISSILE



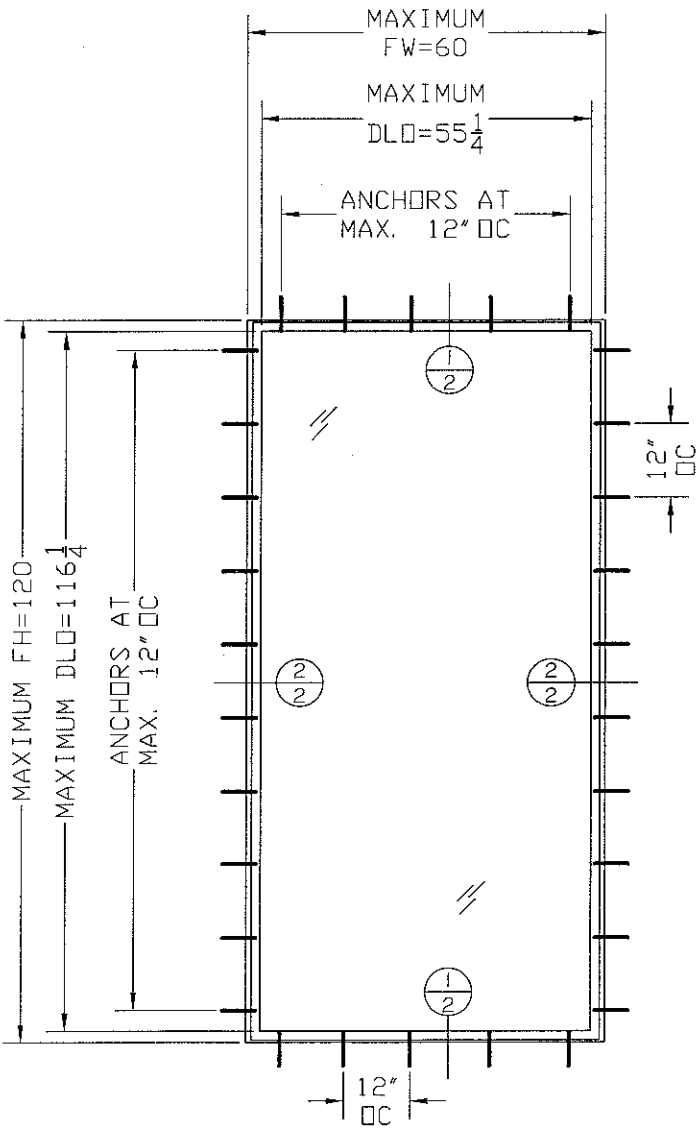
JAN 21 2016

ENGINEERING
ENGCO INC. - CA 8116
1791 BLOUNT ROAD UNIT 307
POMPANO BEACH - FL 33069
ENGCOINC.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

GENERAL NOTES:

- 1- CODE: THIS PRODUCT HAS BEEN TESTED UNDER PROTOCOLS TAS 201, 202 AND 203 AND DESIGNED IN ACCORDANCE WITH THE FBC 2014 INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2- DEFINITION: THIS PRODUCT IS A FIXED WOOD TYPE WINDOW DESIGNED, CONSTRUCTED AND TESTED TO PROVIDE PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS (LARGE & SMALL MISSILE) WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL.
- 3- POSTING: PRODUCT SHALL BE LABELED AS PER FBC 2014 SECTION 1710.5.1.1. THE PERMANENT LABEL, MARKING OR ETCHING SHALL PROVIDE TRACEABILITY TO THE MANUFACTURER AND PRODUCT.
- 4- LOADS: DESIGNED LOAD CALCULATED BASED ON THE ASCE 7-10 AND PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE PRESSURES HEREIN SPECIFIED. THE DESIGN PRESSURES, AS DETERMINED FROM ASCE 7-10, ARE PERMITTED TO BE MULTIPLIED BY 0.6 AS PER THE FLORIDA BUILDING CODE 2014 SECTION 1710.5.
- 5- MATERIAL:
 - 5.1- ALL WOOD TO BE WITH MINIMUM 0.55 SPECIFIC GRAVITY CORRECTED FOR 12% MOISTURE CONTENT PER NDS 0.58 RAW. DENSITY OF BUTCHER BLOCK CONSTRUCTION WITH VENEER 0.535 g/cm³.
 - 5.2- GLAZING: LAMINATED IMPACTED RATED AS SPECIFIED IN THIS APPROVAL
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS.
- 7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
 - 7.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.
 - 7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
 - 7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

APPROVED UNIT



WIND STRUCTURAL: PD= +75 PSF, -75 PSF
WIND CYCLIC: PD= +75 PSF, -75 PSF
IMPACT RATING: LARGE & SMALL MISSILE

WATER RESISTANCE: ASTM E331, 11.3 PSF
(15% OF +75 PSF)
AIR INFILTRATION: ASTM E283 - 0.024 ft³/min-ft

TABLE OF CONTENTS:

SHEET	DESCRIPTION
1 OF 4	GENERAL NOTES, TABLE OF CONTENTS, APPROVED UNITS
2 OF 4	DETAILS, BILL OF MATERIALS, PRODUCT COMPONENTS
3 OF 4	FRAMING ANCHORAGE
4 OF 4	FRAME ASSEMBLY

WINDOW CAN BE ROTATED

PRODUCT:
BORANO SERIES
FIXED WINDOW
LARGE & SMALL MISSILE
IMPACT RATED

MANUFACTURER:
BORANO INC
222 NE 27TH STREET
MIAMI-FLORIDA- 33137
TEL: (561) 939-3368
FAX: (877) 839-2220

PK

DRAFTING & MORE INC.

SCALE:

NA

DATE:

01/12/2016

DRAWING #

16-014

SHEET

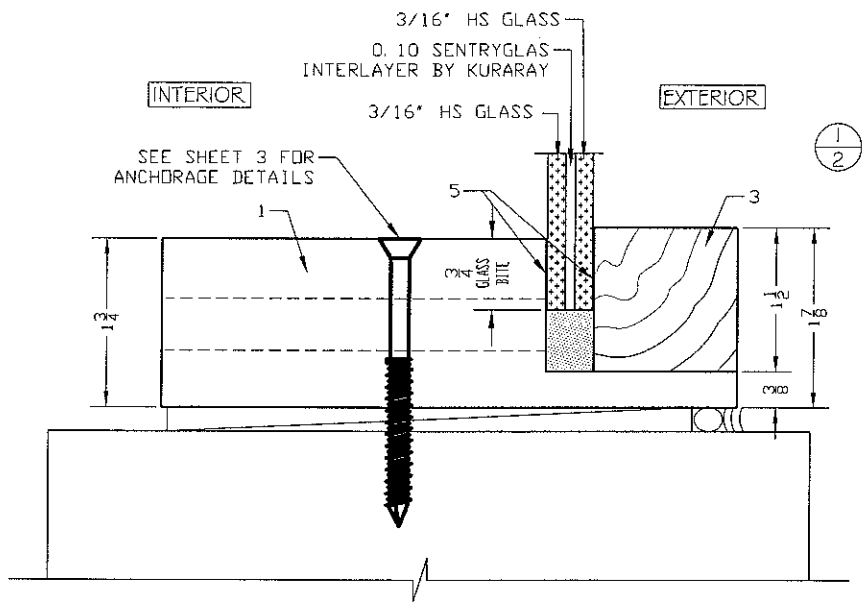
1 OF 4

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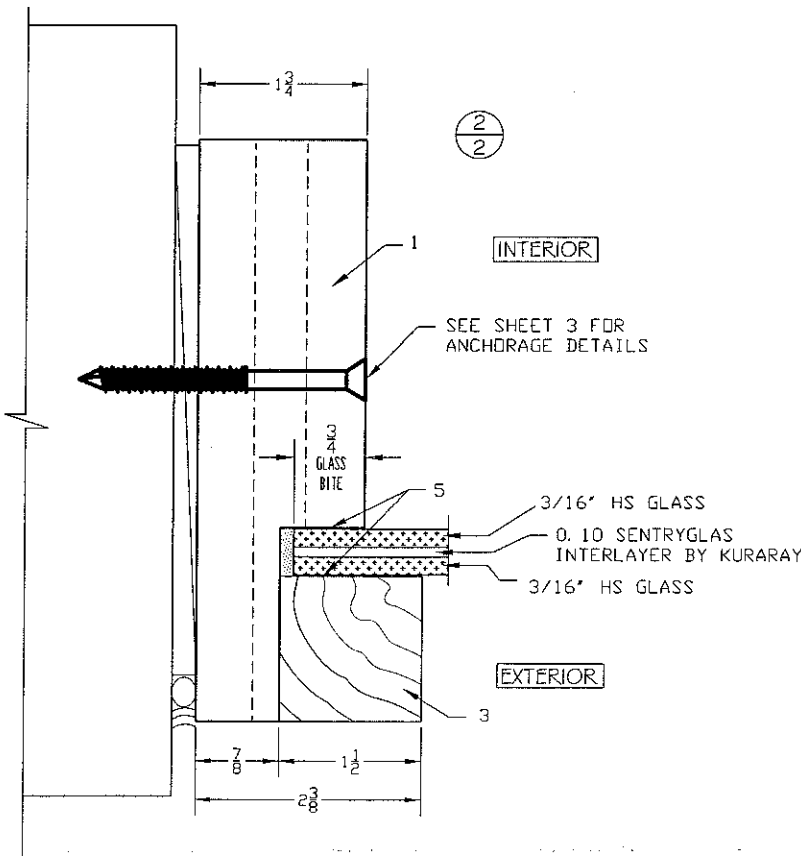
Approved as complying with the
Florida Building Code
Date: AVL 04, 2016
NOA# 16-0518-02
Miami Dade Product Control

By Ishag I. Chaudhry

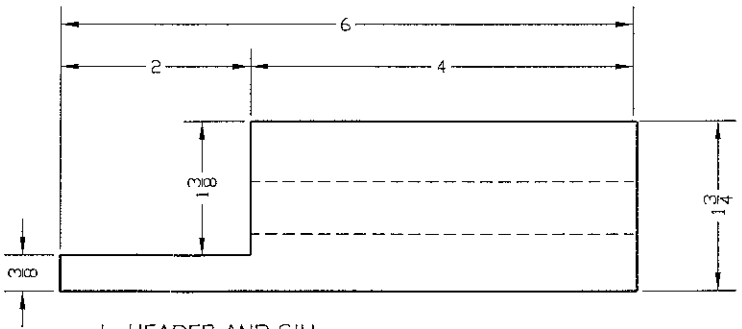
PRODUCT TYPICAL SECTION



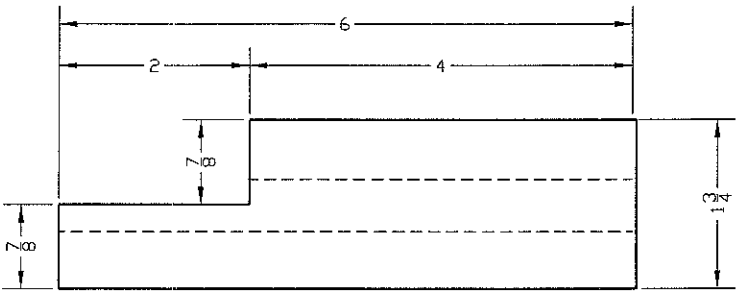
SETTING BLOCKS ARE REQUIRED FOR WINDOW SILL OVER 36" WIDE



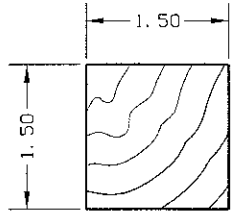
PRODUCT COMPONENTS



1 - HEADER AND SILL
LAMINATED MAHOGANY WOOD
OR SOLID MAHOGANY WOOD



2 - JAMBS
LAMINATED MAHOGANY WOOD
OR SOLID MAHOGANY WOOD



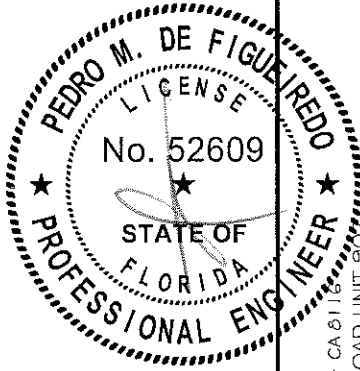
3 - GLAZING STOP
SOLID MAHOGANY WOOD

BILL OF MATERIALS:

PART#	DESCRIPTION	MATERIAL
1	6 X 1 3/4 HEADER & SILL FRAME	LAMINATED/ SOLID WOOD
2	6 X 1 3/4 JAMBS FRAME	LAMINATED/ SOLID WOOD
3	1 1/2 X 1 1/2" GLASS STOP	SOLID WOOD
4	1/2" IMPACT GLASS	LAMINATED HS GLASS
5	DOW CORNING 995	STRUCTURAL SILICONE

ASSEMBLY SCREWS / NAILS:

PART#	DESCRIPTION	MATERIAL
S1	#10 X 3" PFH SMS	ZINC PLATED STEEL
S2	#10 X 2" PFH SMS	ZINC PLATED STEEL
N1	1" FINISHED NAILS	GALVANIZED



JAN 21 2016

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TEL: (561) 939-3368
FAX: (561) 839-2220

PK

DRAFTING & MORE INC.

SCALE:
NA

DATE:
01/12/2016

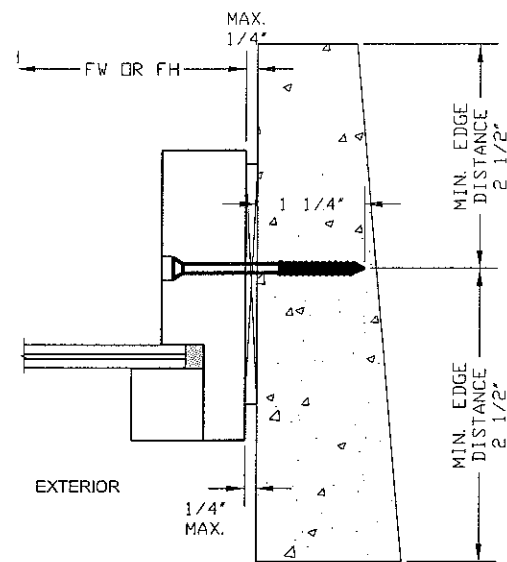
DRAWING #
16-014

SHEET
2 OF 4

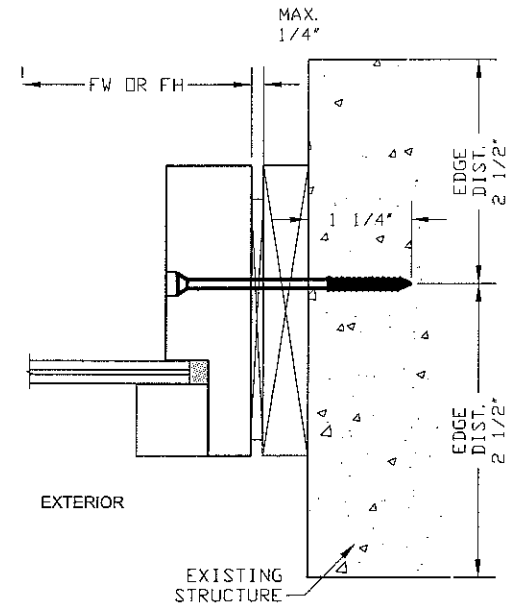
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Date 8/4/16
NOA# 16-0518.02
Miami Dade Product Control
By [Signature]

FRAMING ANCHORAGE

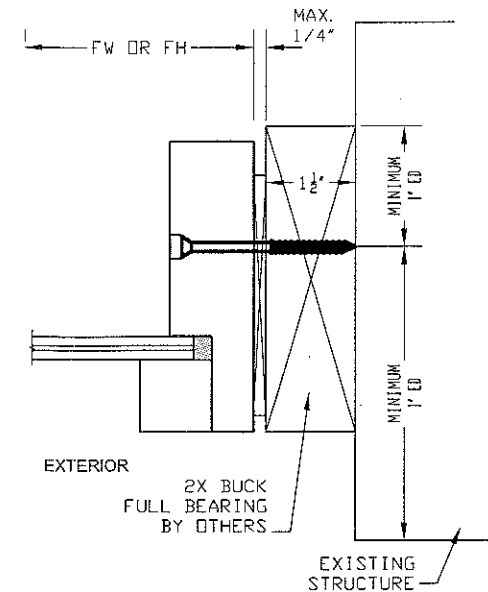
FRAMING ANCHORAGE DETAILS



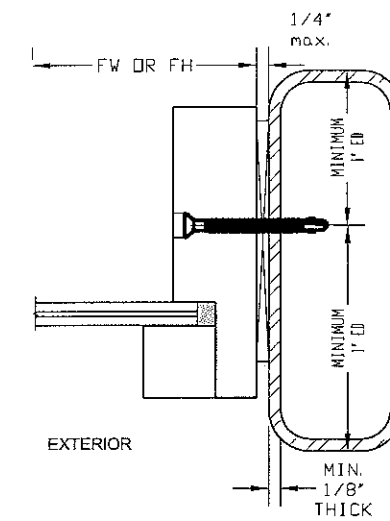
OPTION 1
FRAME MOUNTED DIRECTLY INTO SUBSTRATE WITH
MAXIMUM 1/4" SHIM AND 1/4" TAPCONS BY ITW
BUILDEX WITH 1 1/4" MIN. EMBEDMENT INTO
MASONRY (JAMBS) OR INTO 3000 PSI CONCRETE
(REFER TO ELEVATIONS FOR ANCHORS QTY. AND
LAY-OUT)



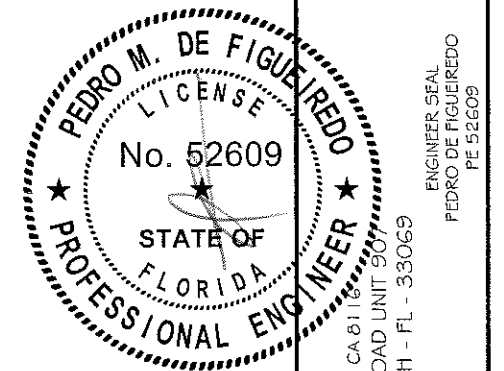
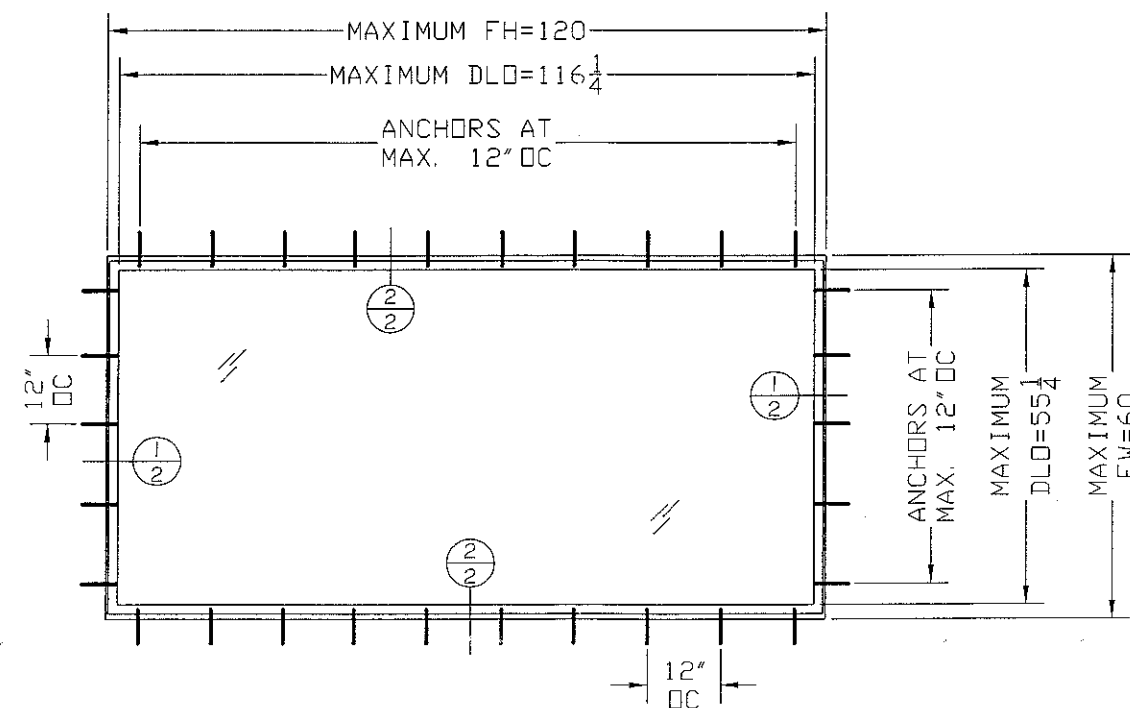
OPTION 2
FRAME MOUNTED WITH MAXIMUM 1/4" SHIM AND MAXIMUM
1X PT CONTINUOUS WOOD SPACER SECURED BY 1/4"
TAPCONS BY ITW BUILDDEX WITH 1 1/4" MIN. EMBEDMENT
INTO MASONRY (JAMBS) OR INTO 3000 PSI CONCRETE.
FOR INSTALLATION INTO METAL STRUCTURES USE 1/4-20
HHW GRADE 5 SDS
(REFER TO ELEVATIONS FOR ANCHORS QTY. AND LAY-OUT)
1X BUCK TO BE PROPERLY DESIGNED BY OTHERS.



OPTION 3
FRAME MOUNTED DIRECTLY INTO 2X PT WOOD BUCK
(SG>=0.55) W/ MAX. 1/4" SHIM AND SECURED BY
#14 SS WOOD SCREWS OR 1/4" TAPCONS W/ 1 3/8"
MIN. EMBEDMENT.
(REFER TO ELEVATIONS FOR ANCHORS QTY. AND
LAY-OUT)
2X BUCK TO BE PROPERLY DESIGNED BY OTHERS.



OPTION 4
FRAME MOUNTED DIRECTLY INTO METAL
STRUCTURES W/ MAX. 1/4" SHIM. 1/4"-20
PFH SDS GR 5 INTO MIN. 1/8" A36 STEEL OR
6063-T6 ALUMINUM.
(REFER TO ELEVATIONS FOR ANCHORS QTY.
AND LAY-OUT)



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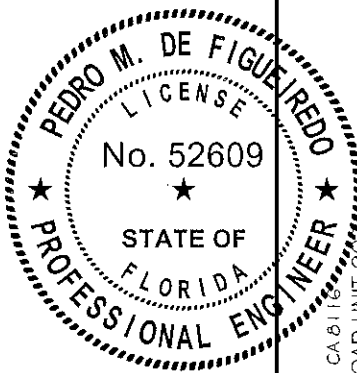
DRAWING #
16-014

SHEET
3 OF 4

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Miami Dade Product Control
By Ishay I. Khan

WINDOW FRAME ASSEMBLY



JAN 21 2016

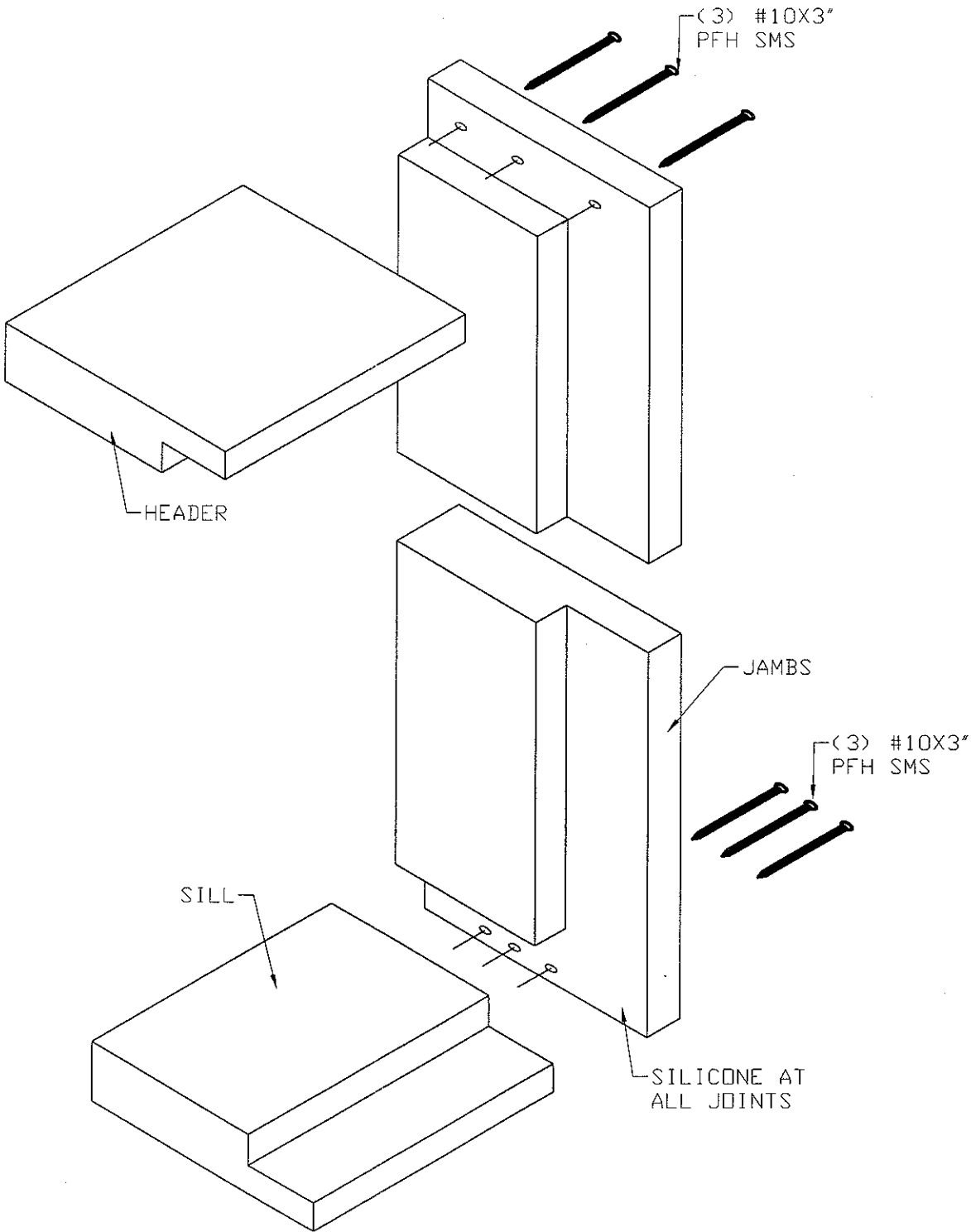
ENGINEERING
ENGCO INC. - CA 8116
1791 BLOUNT ROAD UNIT 907
POMPANO BEACH - FL - 33069
ENGCOINC.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

FRAME CONSTRUCTION:

THE JAMBS WERE RABBET AND BUTT JOINED WITH SILL AND HEADER USING (3) #10X3" PFH5MS IN EACH CORNER AND SEALED USING SILICONE

SEALANT:

EXTERIOR PERIMETER WAS CAULKED WITH SIKAFLEX-1A SILICONE SEALANT. THE BORANO GLUE PART #M3 WAS USED TO GLUE THE JOINTS AS WELL AS BUTCHER BLOCK CONSTRUCTION



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4 OF 4

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Miami Dade Product Control
By Ishag I. Ghanem